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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/940,550	08/27/2001	Luke Mankin	16313-0055	4978

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EXAMINER

FOX, DAVID T

ART UNIT	PAPER NUMBER
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1638

DATE MAILED: 02/10/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/940,550

Applicant(s)

Markin et al

Examiner

FOX

Group Art Unit

1638

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE -1- MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

### Status

- ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

### Disposition of Claims

- ☒ Claim(s) 1-60 is/are pending in the application.
- ☐ Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☒ Claim(s) 1-60 are subject to restriction or election requirement.

### Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
  - ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
  - ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
  - ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

### Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other \_\_\_\_\_

Office Action Summary

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Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-9, 21-25, 27, and 30-38, drawn to a method of using a polynucleotide comprising a recombinase-encoding gene and another gene encoding a trait of interest under the control of a somatic tissue-specific promoter, flanked by recombinase-recognition sites, to obtain transformed plants, and the resultant plants, classified in class 800, subclass 278, for example.
- II. Claims 10-11 and 39-40, drawn to a method of using a recombinase-encoding gene under the control of a seed-specific promoter for the production of seedless or germinant-lethal plants, classified in class 800, subclass 287, for example.
- III. Claims 12 and 41, drawn to a method of using a recombinase-encoding gene under the control of a pollen-specific promoter for the production of male sterile plants, classified in class 800, subclass 300, for example.
- IV. Claims 13-15, 42-44 and 49-54, drawn to a method of using an inducible promoter ligated to a recombinase gene for the pathogen- or heat-induced expression of a recombinase gene, classified in class 800, subclasses 279 or 289, for example.
- V. Claims 16-20, 26, 45-48 and 55-57, drawn to a method for using a transactivator and repressor, classified in class 536, subclass 24.1, for example.
- VI. Claims 28-29, drawn to an isolated intron-containing nucleic acid encoding a recombinase, classified in class 435, subclass 462, for example.

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VII. Claims 58-60, drawn to a method of gene stacking comprising transformation with multiple constructs each comprising mutated recombinase recognition sites, classified in class 435, subclass 440, for example.

The inventions are distinct, each from the other because:

Inventions I-VI and VII are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different functions and different effects.

The invention of Group I requires somatic tissue-specific promoters and methods of evaluating gene expression in somatic tissues such as roots or tubers, each not required by any other group. The inventions of Groups I, IV and VI require specific intron-containing recombinase genes, each not required by any other group. The invention of Group II requires seed- or seedling- specific promoters and methods for evaluating female sterility, seedlessness, or germinant lethality, each not required by any other group. The invention of Group III requires pollen-specific promoters and methods of evaluating male sterility, each not required by any other group. The invention of Group IV requires stress- or pathogen inducible promoters, methods of administering environmental stresses or pathogen challenges, and methods of evaluating resistance to environmental stresses or pathogens, each not required by any other group. The invention of Group V requires transactivator genes, and repressor-recognition sequences, each not required by any other Group. The invention of Group VII requires multiple recombinase

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constructs, multiple recombinase-recognition mutant sequences, and methods of their use, each not required by any other group. The inventions of Groups I-V require plant transformation and regeneration methods, not required by Groups VI and VII.

Inventions VI and I are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product can be used in a materially different process, such as the excision of another gene under the control of a constitutive promoter in an animal cell, or the *in vitro* production of recombinase protein.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, classification, and fields of search, restriction for examination purposes as indicated is proper.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

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Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David T. Fox whose telephone number is (703) 308-0280. The examiner can normally be reached on Monday through Friday from 10:30AM to 7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson, can be reached on (703) 306-3218. The fax phone number for this Group is (703) 872-9306. The after final fax phone number is (703) 872-9307.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

February 5, 2003

DAVID T. FOX  
PRIMARY EXAMINER  
GROUP 180/1638

A handwritten signature in cursive script, appearing to read "David T. Fox", with a large stylized "F" at the end.